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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,498	02/25/2004	Darrell Bryant	04975-00009-US	3116

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EXAMINER

BELLINGER, JASON R

ART UNIT	PAPER NUMBER
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3617

DATE MAILED: 09/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/786,498	BRYANT ET AL	
	Examiner	Art Unit	
	Jason R. Bellinger	3617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cochran et al in view of Connell et al. Cochran et al shows a disc wheel 10 having a disc 30, and a rim 20. The disc 30 includes a central bolt circle mounting portion 32, an intermediate portion 34 extending radially outwardly from the mounting portion 32, and an outer peripheral portion 36 surrounding the intermediate portion 34. The outer peripheral portion 36 forms an outboard tire bead retaining flange for the wheel 10.

The rim 20 includes an inboard tire bead seat portion 24, an inboard tire bead retaining flange 22, a drop center well portion 26, and an outboard bead seat portion 28. The outboard edge of the rim 20 includes a radially in-turned circumferentially continuous rim flange portion 40 that is adjacent the outboard bead seat 28. The disc 30 and rim 20 are welded together by a continuous weld 42 at the in-turned rim portion 40.

Cochran et al does not show the radially in-turned rim flange portion including serrations on an outboard side thereof. As best shown in Figure 8-10 (specifically Figure 10), Connell et al teaches the use of a flange portion 32' having serrations 106 on an outboard surface of the flange 32'. The serrations 106 are in contact with the flange portion 32, wherein the flange portions (32 & 32') are welded together. The serrations 106 enhance and enable penetration of the welding material between the flanges (32 & 32') to provide a high quality, uniform weld.

Therefore from this teaching, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the in-turned flange portion of the rim with serrations in order to facilitate the welding process in order to form a uniform weld.

3. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cochran et al in view of Connell et al as applied to claim 1 above, and further in view of Shimizu et al. Cochran et al shows the disc wheel having vent holes 38 in an intermediate portion.

Cochran et al as modified by Connell et al does not show an axially inboard offset marginal portion surrounding each vent hole as reinforcement. Shimizu et al teaches the use of a disc wheel having vent holes 8 with axially inboard offset marginal portions 5 surrounding each vent hole 8 as reinforcement. Therefore from this teaching, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the wheel of Cochran et al as modified by Connell et al with reinforcing sections around each vent hole for the purpose of increasing the strength of the intermediate portion of the disc wheel to prevent warpage at the vent hole after prolonged usage.

While Cochran et al as modified by Connell et al and Shimizu et al does not specify that the vent holes are formed by a coining operation, only the structure of the product need be found in a product by process claim, given that the product may be formed by a different process (see MPEP 2113). In this case, the vent holes may be formed by a stamping, molding, or casting operation.

Response to Arguments

4. Applicant's arguments with respect to claims 1-4 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references are considered to show disc wheels having serration located at the weld area between the disc and the rim. For example, Kamahori shows a wheel of the type described above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason R. Bellinger whose telephone number is 571-272-6680. The examiner can normally be reached on Mon - Thurs (9:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Morano can be reached on 571-272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jason R Bellinger
Examiner
Art Unit 3617

JASON R BELLINGER
PATENT EXAMINER

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9/1/05